

# Notice of Allowability

Application No.

09/718,717

Examiner

Terry A. McKelvey

Applicant(s)

JAKOBOVITS ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the reply filed 10/22/04.
2. ☒ The allowed claim(s) is/are 11 and 12.
3. ☒ The drawings filed on 22 November 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paula Borden on 12/14/04.

The application has been amended as follows:

In the title:

The title has been replaced with the following:

-- Method for preparing a mammalian cell deficient in HPRT

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In the specification:

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At page 3, the three paragraphs from line 3 to line 18 have been replaced with the following:

-- FIG. 1 depicts the *hprt* locus in normal mouse and mutant E14TG2a cells and targeting constructs used to delete 55 kb, as described in Example 1, *infra* (Restriction enzyme sites: B; BamHI, C; ClaI, E; EcoRI, X; XhoI, SS; SaII and XmnI).

FIGS. 2A-2B and 3A to 3D depict pulse field gel electrophoresis (PFGE) of *hprt* gene locus in E14.1, E14TG2a, pm4.2 and pm5x.1 cells, as described in Example 1, *infra*. FIGS. 2A and 2B provide schematic illustrations of SacII and BssHII restriction sites in the *hprt* gene locus in E14.1 and pm4.2ES cells. In FIGS. 3A to 3D, a=E14.1; b=E14TG2a; c=pm4.2 and d=pm5x.1 in each panel DNA was digested with SacII (FIGS. 3A, 3B) or BssHII (FIGS. 3C, 3D) and probed with 5' probe (FIGS. 3A or 3C) or 3' probe (FIGS. 3B or 3D).

FIG. 4 depicts inactivation of these mouse *hprt* locus by gene-targeted 55 kb deletion, using the targeting construct (pMp4), as described in Example 1, *infra*. The probes used for analysis (5' and 3' probe) and the structure of the *hprt* gene around targeted region in E14.1 cells, E14TG2a cells and

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targeted clones obtained: B; BamHI, C; ClaI, X; XhoI, R; RsaI, jx; junction and Ex; exon.

FIGS. 5A to 5D provide the results of Southern blot analysis of hprt gene locus in E14.1 (column a) E14TG2a (column b); and targeted ES clones pm4.2 (column c) and pm5x.1 (column d). DNA was digested with BamHI (FIGS. 5A and 5B) or with BamHI/ClaI (FIGS. 5C and 5D) and was probed with 5' probe (FIGS. 5A and 5C) or with 3' probe (FIGS. 5B and 5D). --

In the claims:

12. (Currently amended) The method of claim 11 which further comprises the steps of
- a) identifying cells containing said ~~deletion~~ deficiency by selecting cells containing a selectable marker present in said construct; and
  - b) recovering cells containing said ~~deletion~~ deficiency.

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### **Conclusion**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

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For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Any inquiry concerning rejections or objections in this communication or earlier communications from the examiner should be directed to Terry A. McKelvey whose telephone number is (571) 272-0775. The examiner can normally be reached on Monday through Friday, except for Wednesdays, from about 7:30 AM to about 6:00 PM. A phone message left at this number will be responded to as soon as possible (i.e., shortly after the examiner returns to his office).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel can be reached at (571) 272-0781.



Terry A. McKelvey, Ph.D.  
Primary Examiner  
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December 27, 2004